



## SEAMING STRUCTURE USING IN BASEBALLS AND SOFTBALLS

### FIELD OF THE INVENTION

The present invention relates to ball structures, and particular to a  
5 seaming structure using in baseballs and softballs, wherein the protrusions  
at edges of the covers of the ball is made by coarse wires so that the  
manufacturing process is easily, material used is saved, and cost is  
reduced.

### 10 BACKGROUND OF THE INVENTION

With reference to Figs. 1 and 2, the prior art structure for baseballs  
and softballs is illustrated. Two covers 10a, 10b close the ball core 40 by  
using seaming wires 30. Each of the covers 10a, 10b has two large round  
portions at two ends and the middle portion connected to the two round  
15 portions are narrowed. At the edge of each cover 10a, 10b near the  
seaming portion is installed with a protrusion 20 so that the ball can be  
controlled preferably.

However, in the manufacturing process, the covers 10a, 10b must be  
made to have a shape matching the protrusions 20. Then the protrusions  
20 must be glued into the lower sides of the covers 10a, 10b manually.  
Then the covers 10a, 10b are seamed by the seaming wires 30. The  
process is complicated and great work time is necessary. Moreover, the  
shape of the protrusion 20 must match the shape of the covers 10a, 10b so  
that a great part of the material for protrusions are wasted and thus cost is  
25 increased.

## **SUMMARY OF THE INVENTION**

Accordingly, the primary object of the present invention is to provide a seaming structure using in baseballs and softballs, wherein the protrusions at edges of the covers of the ball is made by coarse wires so that the manufacturing process is easily, material used is saved, and cost is reduced.

To achieve above objects, the present invention provides a seaming structure using in baseballs and softballs. Two covers including a first cover and a second cover which close a ball core. A first seaming wire seams the two covers by alternatively passing through the two covers. Each of two upper seaming wires is arranged at an upper edge of one respective cover and is confined by a surface of the cover and the second seaming wire. Two lower seaming wires are similarly arranged, but they are arranged below the two covers. Moreover, a diameter of the upper seaming wires is equal to, great than or smaller than that of the upper seaming wires.

The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 is a schematic view showing the structure of the prior art baseball or softball.

Fig. 2 shows the seaming portion and arrangement of protrusion of the

prior art illustrated in Fig. 1.

Fig. 3 is a schematic view showing the structure of the first embodiment of the present invention.

Fig. 4 is a schematic view showing the arrangement of the seaming  
5 wires in the first embodiment of the present invention.

Fig. 5 is a schematic view showing the structure of the second embodiment of the present invention.

Fig. 6 is a schematic view showing the arrangement of the seaming  
wires in the second embodiment of the present invention.

10 Fig. 7 is a schematic view showing the structure of the third embodiment of the present invention.

Fig. 8 is a schematic view showing the arrangement of the seaming  
wires in the third embodiment of the present invention.

## 15 DETAILED DESCRIPTION OF THE INVENTION

In order that those skilled in the art can further understand the present invention, a description will be described in the following in details. However, these descriptions and the appended drawings 1 to 8 are only used to cause those skilled in the art to understand the objects, features,  
20 and characteristics of the present invention, but not to be used to confine the scope and spirit of the present invention defined in the appended claims. In the following, the present invention will be described herein with reference to Figs. 1 to 8.

With reference to Figs. 3 to 4, the first embodiment of the present  
25 invention is illustrated. As above said prior art, in the present invention,

two covers 10a, 10b which close the ball core 40 by using seaming wire 30. The other features of the present invention will be described here.

Each of the covers 10a, 10b has two large round portions at two ends and the middle portion connected to the two round portions are narrowed.

5 A first seaming wire 30 seams the two covers 10a, 10b. The first seaming wire 30 alternatively passes through the two covers 10a, 10b, that is, the first seaming wire 30 goes from one side of one of the two covers 10a, 10b to the other side of the cover and then enters to one side of the other cover and then passes through the other cover to the other side of the  
10 cover. The process is repeated until the edges of the two covers 10a, 10b are seamed.

Second seaming wires 60 including two upper seaming wires 60a and two lower seaming wires 60b serve to seam the two covers 10a, 10b. Each of the upper seaming wires 60a is arranged at an upper edge of one  
15 respective cover and is confined by the surface of the cover and the first seaming wire 30. Each of the lower seaming wires 60b is arranged at a lower edge of one respective cover and is confined by the surface of the cover and the first seaming wire 30. The upper seaming wires 60a and upper seaming wires 60b are made of wire with larger diameters.  
20 Thereby, the seaming portions of the covers 10a, 10b are formed as protrusions 50. Thus the holder has a preferred holding effect as he (or she) holds the ball.

Referring to Figs. 5 and 6, the second embodiment of the present invention is illustrated. In this embodiment, all the components and  
25 arrangements of the ball are identical to those in the first embodiment.

However, in the second embodiment, the diameter of the upper seaming wires 60b is larger than that of the upper seaming wires 60a.

Referring to Figs. 7 and 8, the second embodiment of the present invention is illustrated. In this embodiment, all the components and  
5 arrangements of the ball are identical to those in the first embodiment. However, in the second embodiment, the diameter of the upper seaming wires 60b is smaller than that of the upper seaming wires 60a.

The present invention is thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded  
10 as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.